

Item ID:

D117-762-041

Revision ID:

Item Name:

Replacement Skidtuba

Start Date:

05/01/2010

Star Qty: 1.00 Required Date: 18/01/2010

131'd Qty: 1.00



Accept

Date:

Date:

Setup Start



Cua Item ID:

Start

Run

Stop

Approvals:

Reference:

QC:

Operation Description Set Up/ **Run Hours**

0.00

0.00

SPC (Y/N):

Draw Number Draw Rev.

Plan Code

Qty

Accept Reject Qty

Reject Number

Insp. Stamp

Work Center ID Draw Nbr

Sequence ID/

Revision Nbr

D3582

Rev A

100

Document Control

DOCUMENT CONTROL

DC

Memo

Date:

Photocopy bluefile & type labels per PPP D117-762-041

CHG001

110

120

Skidtubes Skidtubes

Skidtubes

Memo

0.00

0.00

1-Determine square end of tube and deburr 2-Drill #30 pilot holes using DT8678.

3- open holes to 5/16"

0.00

BENDING MACHINE - SKIDTUBES

Bend tube as per program D3582 on CNC Bender and Dwg D3582. Use 5/16"

locator pin on buggy "A".

à ms 10-01-06

CNC Bend 1

CNC Delta 100 Bender

Memo

0.00

W/O:			WC	ORK ORDER CHANGE	ES ·	-		· ·
DATE	STEP	PRO	OCEDURE CHA	NGE ⁻	Ву	Date (Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA:	Date: _	
	R	tesolution:	Dispositio	n:	QA: N/C CI	osed:	Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCF	R)		
DATE	OTED	Description of NC		Corrective Action Section		Verificat	ion Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		QC Inspector
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Item ID:

D117-762-041

Accept



Setup Start



Stop

Revision ID:

Replacement Skidtube Item Name:

Start Date:

05/01/2010

Start Oby: 1.00

Required Date: 18/01/2010 Req'd ty: 1.00



Cust Item ID:

Custor ::

Reference:

Process Plan: Approvals:

QC:

Date:

Tooling:

Date:

Run

Stop

Start

Sequence ID/ Work Center ID

Operation Description Set Up/ **Run Hours**

> Mb 1-06

Draw Number Draw

Date:

Plan Code

Accept Qty

Reject

Reject

Insp.

130



Skidtubes

Skidtubes

SPC (Y/N):

0.00

Rev.

Qty

Number

Stamp

Skidtubes

Memo

1-Cut Fwd end of the tube using DT8185

Date:

2-Cut Aft end using DT8185

3-Deburr ends

4-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***

5-Locate DT 8973 & Drill Ground wire hole on top of Tube.

6-Install 3/16 cleco in Ground wire hole, then drill all X-Boltholes using 3/16" drill.

7-Drill pilot holes for wearplates using DT8974

8-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

9- open ground wear holes to 0.391" as per section B-B

10-Open Aft Cap holes using .209" drill.

11-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to fnish size.





Dart Aerospace Ltd

W/O:		WORK O	RDER CHANGES				3	1
DATE	STEP	PROCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #: Fault Category:	NCR:	Yes	No DQ	A :	_ Date: _	
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
		Description of NC		Corrective Action Section B	,	Verification	Ammunial				
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Work Order ID 54882



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January 5, 2010 8:03:41 AM

Required Date: 18/01/2010

Item ID: **Revision ID:** D117-762-041

Replacement Skidtube

Accept

Setup Start

Stop

Item Name: **Start Date:**

05/01/2010

Start Qty: 1.00 Reg'd (: 1.00

Cust Item 13: Custome

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Qty



Date:

SPC (Y/N):

Date:

Number

Stop

Sequence ID/ Work Center ID

Operation Description

Set Up/ **Run Hours** 0.00

Draw Draw

Plan Rev. Code

Accept Qty

Reject Reject

Insp. Number Stamp

140

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Weld fwd cap D2964 per dwg D3582 and QSI 004 Batch: 112860 A/R AL ROD

2-Grind flush

QC10- Inspect visual per QS1004- ground welds

0.00

150

QC

Quality Control

Memo

Memo

160

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

W/O:				WORK ORDER	CHANGES				1	1 .
DATE	STEP		PR	OCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC inspector
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
		Description of NC		Corrective Action Section E	3	Verification	Approval	Approval QC Inspector			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng				
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Required Date: 18/01/2010

Item ID:

D117-762-041

Accept

Setup Start



Stop

Revision ID:

Item Name:

Replacement Skidtube

Start Date:

05/01/2010

Start Qty: 1.00 Req'd Qty: 500

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

QC: ___

Date:

Date:

Tooling:

0.00

0.00

SPC (Y/N):

Date:

Date:

Rev.

Run

Start



Stop



Sequence ID/ Work Center ID

170

HandFinish

Hand Finishing

Operation Description

Chemical Conversion Coat per QSI005 4.1

Memo

Set Up/ **Run Hours**

Number

Draw Plan Code

Accept Qty

Reject Reject Qty

Insp. Number Stamp

MB 10-01-12

180

QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

N 10/1/12

W/O:		WORK ORDER CHANGES								
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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	Resolution:		Disposition:	_ QA: N/C Closed:	Date:
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
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Work Order ID 54882



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January 5, 2010 8:03:41 AM

Item ID:

D117-762-041

Accept

Setup Start

Revision ID:

Replacement Skidtube Item Name:

Start Date:

05/01/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Required Date: 18/01/2010

Process Plan:

Date:

Tooling:

Date:

Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

190

Skidtubes Skidtubes

Operation Description

Set Up/ **Run Hours** Number

Draw Rev.

H (0/1/12

Plan Code

Accept Qty

Reject Qty

Run

Reject Number

Insp. Stamp

Skidtubes

Memo

0.00

0.00

1-Open X-Bolt holes to finish size as per Dwg D3582, all sections

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube, prep. tube for welding.

4-Bond web as per Dwg D3582 & OSI N15 A/R 241 Sike Flex Batch: Exp Date: 12/2/30

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B. A/R AL ROD Batch: MIA BOO BE

6-Grind welds flush

QC10- Inspect visual per QSI004- ground welds

am 10-01-140

200

Quality Control

Memo

Scoloiley

0.00

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
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Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resolution:		Disposition:	QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
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DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		Section C	Approval Chief Eng	Approval QC Inspector			
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Work Order ID 54882

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January 5, 2010 8:03:41 AM

Required Date: 18/01/2010

Item ID:

D117-762-041

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

05/01/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Number



Plan

Code

Draw

Rev.

Run Start

Reject

Qty



Reference:

Approvals:

Date:

Date:

Tooling: SPC (Y/N):

Set Up/

Run Hours

Date: Date:

Stop



Number Stamp

Reject

Sequence ID/

Work Center ID

210

QC

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

>> Diolodiu

Accept

Qty

Pressure Wash per QSI005 4.3

Memo

=) M 18-01-10

215

HandFinish

Hand Finishing

Memo

Memo

0.00

220

Powdercoat Powder Coating

START TIME 16:30AM OVEN TEMPERATURE: 37 FINISH TIME: 11:00/Au

7)4 18-10-01

0.00

W/O:		WORK ORDER CHANG	WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
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Part No:		PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
	Resolution:		Disposition:	QA: N/C Closed:	Date:

	WORK ORDER NON-CONFORMANCE (NCR)											
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Work Order ID 54882



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January 5, 2010 8:03:41 AM

Required Date: 18/01/2010

Item ID:

D117-762-041

Accept



Setup Start



Revision ID: Item Name:

Replacement Skidtube

Start Date:

05/01/2010

Start Qty: 1.00

Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

230

Quality Control

Operation Description

QC3- Inspect Part Finish

Set Up/ **Run Hours**

Draw Draw Number

Code Rev.

Plan

Reject Accept Qty Qty

Reject Number Stamp

Memo

0.00

0.00

240



Hand Finishing

HandFinishing

0.00

5K 10-01-31

250



Hand Finishing

HandFinishing

0.00

0.00

Memo

1-Inspect for Foreign objects

2-Install Aft cap as per Dwg D3582, Detail A/R 241 Sika Flex Batch: ///

3-Install Wearplates as per Dwg D Note:Install Bolt and walche

Install Wearplate & Ground Wire inserts as per Dwg D3582

butch: 112900. m.h w/02/16/1x



W/O:		WORK ORDER CHANGES												
DATE	STEP	PRO	PROCEDURE CHANGE				Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
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Part No:		PAR #:	Fault Cate	gory:	NCR: Yes No DQA: Date:									
Resolution:		esolution:	Disposition	1:	QA: N/C Clo	Date: _								
NCR:		\	WORK ORDI	ER NON-CONFORMAN	ICE (NCR				· · · · · · · · · · · · · · · · · · ·					
DATE	STEP	Description of NC	Corrective Action Section B			Verification		Approval	Approval					
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W/O:		WORK ORDER CHANGES								
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			

Part No: DII7- 762-041 PAR #: 7 Fault Category: Proc. Skidtubes. NCR: Yes (No) DQA: Date: 10.02.04

Resolution: <u>re-work</u> Disposition: <u>re-work</u> QA: N/C Closed: ____ Date: ___

NCR: 54882		WORK ORDER NON-CONFORMANCE (NCR)											
· • · · · · · · · · · · · · · · · · · ·		Description of NC	[Corrective Action Section B		Verification	Approval	Approval QC Inspector					
DATE :	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng						
10.02.04	250	upon ASSembly of the D3508-9 wear plate, it was noticed that the buys in the tube were too narrow and cousing the busomph to lift in the center when tightened.	te Josius.	Drill jig find hole angle slightly changed (camein) with use, due to mild O.D coushing on the tube from bendin DT8974 is Remarked.	500 9. 011	10.02.04	DSILL	10.02.04					
		R.C. Tooling.	10.02.01	on the 2 most fuct holes on the D3508-9 wearphate, of Slot the holes, square, to max 0.060 (or as necessary), to Allow the bolts to tighten	10-2-11	Siderlie	10.52,07 05/042	10.02.04					
			10. W.M	with out any bending upof the wear plate.	1	Sobeho	10.02.04 10.02.04 051.042	1,0.02.04					

Work Order ID 54882

Page 8

January 5, 2010 8:03:41 AM

Item ID:

D117-762-041

Accept



Setup Start



Revision ID:

Ite.n Name:

Equired Date: 18/01/2010

Replacement Skidtube

Stort Date:

05/01/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Draw

Number



Run

eference:

Approvals:

Date:

Tooling:

Date:

Draw

Rev.

Plan

Code

Start



QC:

Process Plan:

Date:

SPC (Y/N):

Date:

Stop

Reject

Qty



Number Stamp

Reject

Insp.

Sequence ID/ **Work Center ID**

260

QC

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Set Up/ **Run Hours**

Accept

Qty

270

Packaging

Packaging

Packaging

Memo

Memo

0.00

0.00

0.00

Identify and pack for shipping as per PPP D117-762-041

Location:

PPP Rev:

280

QC21- Final Inspection - Work Order Release

0.00

Quality Control

Memo

0.00

W/O:

		i											
DATE	STEP	Р	ROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspector					
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Part No):	PAR #:	Fault Category:	NCR: Ye	es No DQ	A:	Date: _						
	F	Resolution:	Disposition:	QA: N/C	Closed:		Date: _						

WORK ORDER CHANGES

NCR:		WORK ORDER NON-CONFORMANCE (NCR)												
		Description of NC		Corrective Action Section E	Verification	Approval	Approval							
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	QC Inspector						
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Picklist Print

January 5, 2010 8:03:46 AM

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Manufactured



Start Date: 05/01/2010

Required Date: 18/01/2010

Start Qty: 1.00

Required Qty: 1.00

Compant Item ID/	Replacement Item ID	Mfg/ Purch	Bin Item	Primary American Last Location Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty To Pick	Qty=	Date Issued	Status
D2962-150		Manufactured	No		110	Each	36.0000	1.0000	ub 10-01	-06	

3.540 Outer Tube, Extrut					
,		Warehouse	Loc Oty	Loc Code	
		Location			
		Main Warehouse			
		ST	36		
		28672	36		(14)
D2964	Manufactured	No	140 Each	30.0000 1.0000	
Cap					<u> </u>
•		Warehouse	Loc Qty	Loc Code	

D2971 Cross Bolt Spacer

Warehouse	<u>Lo</u>	c Qty	Loc Code		
Location					
Main Warehouse					
ST		30			 _
14101		30			 B1.
	190	Each	37.0000	1.0000	

Loc Code Warehouse Loc Qty Location Main Warehouse ST 37 37 44445

W/O: WORK ORDER CHANGES				ES	S : : : : :					
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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		Disposition	Disposition:							
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NC	R)				
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	<u> </u>									

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Componentiles ID/

Replacement Skidtube

Comments:

Item Name 👙

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Manufactured

Manufactured

Replacement Mfg/ Item ID

Purch

Bin Primary Item Location

Las Location Route Seq ID

Unit of Measure

Oty on Hand

Remaining **Qty To Pick**

Start Qty: 1.00

Start Date: 05/01/2010

Qty Issued

H12/1/12

2 88 10/0/14

Date **Issued**

Required Oty: 1.00

Required Date: 18/01/2010

Status

D3584-1

No Manufactured

No

No

190

Loc Qty

Each

2

Each

2.0000

Loc Code

1.0000

Web

Warehouse Location

LG

Main Warehouse

54349

190

B 55205

199.0000 2.0000

D2973

Cross Bolt Spacer

Warehouse

190

Loc Qty Loc Code

Each

Location

14636

Main Warehouse

ST

199 199

34.0000 1.0000



D3662-3

Crossbolt Spacer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

44456

34 34

T BE 10/01/14

W/O:		WORK ORDER CHANGES								**	
DATE	STEP		PROC	CEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No	•		_ PAR #:	Fault Category:	NCR	: Yes	No DQA	\:	_ Date: _		

Resolution:		esolution:	Disposition:		QA: N/C Closed:		Date:	
NCR:			WORK ORDE	ER NON-CONFORMA	NCE (NCR)			
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DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Component Item I !!

Replacement Skidtube

Comments:

Item Name

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Replacement Mfg/ Item ID Purch

Bin Primary Item Location Last Location &

Route Seq ID

Unit of Measure

Qty on Hand

Remaining Qty To Pick

Start Qty: 1.00

Start Date: 05/01/2010

Otv Issued Status

Required Date: 18/01/2010

Required Qty: 1.00

sued

D3662-1

Manufactured

No

190

Each

Loc Qty

24

6

18

24.0000

Loc Code

3.0000

Crossbolt Spacer

Warehouse Location Main Warehouse

> ST 39022 39585

240

240

2,717.000 36.0000

43 BE 10/01/14

ALS4-1032-130

Purchased

No

No

Each



Insert

Warehouse Location

Main Warehouse

ST 110511 2717

Loc Qty

2717

Each

40

40

40.0000

Loc Code



ALS4-428-165

Purchased

Inserts

Warehouse Loc Qty Location Main Warehouse FΡ 6989

Loc Code

2. ht 10-01-21.

36:Bl 10-01-21

W/O:			WORK ORDER CHANGES						
DATE	STEP		PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspector	
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Part No):	PAR #:	Fault Category:	NCR: Ye	s No DQ	A :	Date: _		
		Resolution:	Disposition:	QA: N/C	Closed:		Date: _		

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
		Description of NC	Corrective Action Section B			Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Initial Action Description Sign &		Section C	Chief Eng	Approval QC Inspector
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Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Comments:

Item Name

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

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Manufactured

Manufactured

Manufactured

* Replacement Mfg/ **™ Item ID** Purch

Bin Primary Item Location

No

Last Location 1 Fibute i Beq ID

250

250

Unit of Qty on Measure Hand

Remaining

1.0000

55.0000

Loc Code

Qty To Pick Issued

Start Date: 05/01/2010

Start Qty: 1.00

Issued

Required Qty: 1.00

Required Date: 18/01/2010

Status

D2965

Component Item ID/

Cap, 105 Skidtube

Warehouse Location

Main Warehouse

FP4

52057 2

Loc Qty

55 55

Each

Each

7.0000

1.0000

-By 10-01-21 «

D3508-3

Wearplate

Warehouse

Location

FP21

51386

Loc Qty

7

Loc Code

Main Warehouse

7 250 Each

3.0000 1.0000 BL 10-01-21

D3508-9

Wearplate

Warehouse

Loc Oty

Loc Code

Location

Main Warehouse

46596

3 3

1 pl 10-21-21.

Dart Aerospace L	_td
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W/O:			WORK ORDER O	WORK ORDER CHANGES				**		
DATE	STEP		PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
 										
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Part No	:	PAR #: _	Fault Category:	NCR: Yes	No DQ	A:	Date: _	1		
	R	esolution:	Disposition:	QA: N/C (Closed:		Date: _			

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
		Description of NC		Corrective Action Section B	ı	Verification	Approval	Approval QC Inspector
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	
···								
<u>-</u>								

NOTE: Date & initial all entries

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC



Start Date: 05/01/2010

Required Date: 18/01/2010

Start Qty: 1.00

Required Qty: 1.00

i i i i i i i i i i i i i i i i i i i		
Component	Item	ID/
Item Name		

Beflacement Mfg/ m ID

Purch

Bin Primary Item Location Last Location

Receio See ID

Unit of Measure Hand

Qty on

Remaining Qty To Pick Issued

Issued

D3558-3

Manufactured

No

250

Each

12.0000

1.0000

1 SUBSILIE	1246	11181	
Gaske	x		

D3558-9

No Manufactured

Loc Qty Loc Code Warehouse Location Main Warehouse ST 12 51391 12 15.0000 250 Each



1 ph 10-01-21

-bk 10-01-21

Gasket

Manufactured

Loc Code Warehouse Loc Qty Location Main Warehouse ST 15 50928 15 250 Each 13.0000



1.0000

Gasket

D3558-11

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	13	
40399	1	
40399 42254 /	12	

1 bx 10-01-21

Dan Ae	rospace	e Lta						,	
W/O: WORK ORDER CHANGE					ES			,	
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
æ									
				· · · · · · · · · · · · · · · · · · ·					
Part No):	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	_ Date: _	
	R	esolution:	Dispositio	n:	QA: N/C CI	osed:		Date: _	
NCR:		\	WORK ORD	ER NON-CONFORMA	NCE (NCF	R)			
DATE	STEP	Description of NC		Corrective Action Section	————— Veritical		cation	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		ion C	Chief Eng	QC Inspector
							·		

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Manufactured

Manufactured

Manufactured



Start Date: 05/01/2010

Required Date: 18/01/2010

Start Oty: 1.00

Required Qty: 1.00

Component	Item	ID/
Item Name		

Repercement	
Iten & D	

Mfg/ Purch Bin Primary Item Location

Last Location

Route # 5 Seq IL

250

Unit of Measure

Each

Oty on Hand

9.0000

Remaining Qty To Pick

1.0000

Date Issued Issued

Oty

Status

D3558-13

Gasket

Warehouse	Loc	e Oty	Loc Code	
Location				
Main Warehouse				
ST		9		
40400		4		
42255+		5		
	250	Each	7.0000	1.0000

BR 10-01-21.

D3508-11

Wearplate

Warehouse	<u>Lo</u>	c Qty	Loc Code	
Location				
Main Warehouse				
ST		7		
40398		2		
40398 46880		5		
	250	Each	5.0000	1.0000

1 fol 10-01-21

D3508-13



Wearplate

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST /	5	
42252	5	

Bf 10-02-21

W/O:			WORK ORDER CHANGES						• •
DATE	STEP	PF	ROCEDURE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						• •	ŝ		
Part No	:	PAR #:	Fault Category:	NCR:	Yes	No DQ	4 :	_ Date: _	
	Resolu	tion:	Disposition:	QA: I	WC C	losed:		Date:	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B		Verification	A	1		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector		
						1				

Work Order ID: 54882

Parent Item:

D117-762-041

Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Manufactured

Manufactured

Start Date: 05/01/2010

Required Date: 18/01/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name

Parent Item Name:

Replacement Mfg/ Item ID®

Purch

Bin Primary Item Location

No

Last Location Route Seq ID

250

250

anit of **Aeasure** Hand

Each

Each

Oty on Remaining **Qty To Pick**

20.0000 2.0000

Loc Code

Qty Issued

Date Issued Stages

D3492-051

Plug Assembly

Warehouse

Location

Main Warehouse

ST

20 20

Loc Qty

2.0000 16.0000

2 pl 10-01-21.

D3492-049

Plug Assembly

Warehouse Location Main Warehouse ST 40356

44632

Loc Code Loc Oty 16 15

2 pt 10-01-21

W/O:		WORK ORDER					
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				,			
					Ĭ.		
Part No	:	PAR #: Fault Category:	NCR: Yes	No DQ	A:	Date: _	

Resolution: _____ Disposition: ____ QA: N/C Closed: ____ Date: ____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)									
D.477		Description of NC	Corrective Action Section B		Verification	A	A				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspecto			
					į						
							į				
-											

Work Order ID: 54882

Component Item ID/

Parent Item:

D117-762-041

Replacement Skidtube Parent Item Name:

Item ID

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Manufactured

Replacentat Mfg/

Bin Primary Item Location Purch

Last Location Route Seq ID

250

lant of N. asure

Each

Hand

68.0000 6.0000

Qty on Remaining Qty To Pick Issued

Start Qty: 1.00

Start Date: 05/01/2010

Issued

6 lf 10-01-21.

Required Date: 18/01/2010

Required Qty: 1.00

D3492-053

Item Name

Plug Assembly

Warehouse	Loc Q	<u>ty</u>	Loc Code
Location			
Main Warehouse			
FP /		66	
54641		66	
Main Warehouse			
ST		2	
44063		2	
	250	Fach	4 915 000 2 0

AN960JD10L

Purchased

No

4,915.000 2.0000



Washer

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		
ST	4915	
101291	16	
104885	25	
105793	236	
109632	174	
110985	4464	

W/O:		WORK ORDER C	•				
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					<u> </u>	<u>.</u>	
				· • •			
Part No	1:	PAR #· Fault Category:	NCR: Yes	No DQ	Δ.	Date:	

Resolution: _____ Disposition: ____ QA: N/C Closed: ____ Date: ____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC	Corrective Action Section B		Corrective Action Section		Verification	Ammassal	Ammerical	
DATE	STEP	Section A	Initial Chief Eng	Initial Action Description Sign &		Section C	Approval Chief Eng	Approval QC Inspector		
					:	:				
•								<u>}</u>		

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Item ID

Comments:

Item Name

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Replacement Mfg/

Purch

Purchased

Purchased

No

Bin Primary Item Location Last Location Route Seq ID

250

Lan of Qty on **N** asure Hand

Each

Remaining 1,195.000 28.0000

Start Date: 05/01/2010

Start Qty: 1.00

Qty To Pick Issued

Status

Required Date: 18/01/2010

Required Qty: 1.00

Date

Issued

AN3C4A

Component Item ID/

BOLT

<u>Warehouse</u>	<u>Lo</u>	Loc Qty		
Location				
Main Warehouse				
ST		1195		
112314		13		
112720		12		
112724		3		
112829		1		
112991		2		
113121		64		
113226		586		
113359		14		
113422		500		
	250	Each	669.0000	2.000

AN3C5A

Bolt

Warehouse		Loc Qty	Loc Code
Location			
Main Wa	rehouse		
ST	113644	669	
	111424	8	
	111707	69	
	112314	1	
	113121	291	
	113149	300	

2	B

28 fd 10-01-21

3/10-01-21

W/O:		WORK ORDER CHANGES					~
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
<u> </u>		*		,			
				•			
Part No	•	PAR #: Fault Category:	NCR: Yes	No DQ	۱:	Date:	

Resolution: _____ Disposition: ____ QA: N/C Closed: ____ Date: ____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B		Verification	Approval	Annroyal		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector		
								·		
						<u>.</u>				
į										

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC



Start Date: 05/01/2010

Required Date: 18/01/2010

ph 10-01-26

Start Qty: 1.00

Required Qty: 1.00

Component I	tem ID/
Item Name	

Replacement Mfg/

Purch

Bin Primary Item Location Last Location

Route Seq ID Uttrof M@sure

Qty on Hand

Remaining **Qty To Pick** Issued

Date Issued

AN960JD416L

Purchased

No

No

250

Each

54

160

795,0000 2,0000

Loc Code



Washer	

Warehouse	Loc Qty
Location	
Main Warehouse	
ST	795

105078 107008 110153

112612

40 297 400 112492 250 Each

416.0000 28.0000

AN960C10L

washer

				_	_	_
λ	1451	149	CO	33	2	R

Purchased

Loc Code Warehouse Loc Qty Location OFFSHORE FG 100 103585 100 Main Warehouse ST 316 112116 156

28. Bf 10-01-2L

Dart	Aerospace	Ltd

W/O:	·		WC	RK ORDER CHANG	FC							
DATE	STEP	PRO	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector						
V			,									
	•	PAR #:	Fault Cate	gory:	_ NCR: Yes N	lo DQA:	Date:					
	Resolution: Disposition:					QA: N/C Closed: Date:						
NCR:		,	WORK ORD	ER NON-CONFORMA	NCE (NCR)							
DATE	STEP	Description of NC		Corrective Action Section		Verification	Approval	Approval				
	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector				

January 5, 2010 8:03:46 AM

Work Order ID: 54882

Parent Item:

D117-762-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Purchased

Start Date: 05/01/2010

Required Date: 18/01/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacem 🐔	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unstaf Messure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status	1
AN4-4A		Purchased	No			250	Each	119.0000	2.0000				

Bolt

	Warehouse		c Oty	Loc Code			
	Location						
	Main Warehouse						
	ST		119				
	101291		3				
	106918		1			- 2 Bl 10-01-21.	
	108138		58			2. 20 00 000	
	111295		57			· · · · · · · · · · · · · · · · · · ·	
No		250	Each	60.0000	6.0000		

O-RING

NAS1611-012

Warehouse	<u>Lo</u>	c Qty	Loc Code	
Location				
Main Warehouse				
ST /		60		
108673		60		
	250	Each	20.0000	2.000

20 20

000

No Purchased

> Loe Qty Loc Code Warehouse Location

Main Warehouse ST

2 /g/ 10-01-21

- 6 pt 10-01-21

O-RING

NAS1611-015

Dart Aerospace Ltd

								_	
W/O:		7. 7.	WO	RK ORDER CHANG	ES				
DATE	STEP	PR	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
								·	
		,	,			•			
									1
Part No	:	PAR #:	Fault Cate	jory:	NCR: Yes	No DQ	A:	Date:	
						QA: N/C Closed: Date:			
NCR:			WORK ORDE	R NON-CONFORMA	NCE (NCF	1)			
DATE	STEP	Description of NC	ription of NC Section A Initial Action Desc			Section B Sign & Section			Approval
		Section A	Chief Eng	Action Description Chief Eng	Date	Secti	ion C	Chief Eng	QC Inspector

January 5, 2010 8:03:46 AM

Work Order ID: 54882

Parent Item:

D117-762-041

Component Item ID/

Parent Item Name: Replacement Skidtube

Comments:

IPP RevD: add pressure wash DD 09.12.11 verified by:EC

Replacemen Mfg/ Item ID

Purch

Bin Primary Item Location

Last Location

Route Seq ID

Unigof Me ure Hand

Qty on Remaining Oty To Pick Issued

Start Date: 05/01/2010 Start Qty: 1.00

> Date Issued

Required Qty: 1.00

Required Date: 18/01/2010

NAS1611-016

Item Name

Purchased

Each

117.0000 2.0000

O-RING

Warehouse		Loc Qty	Loc Code
Location			
Main Warehouse			
ST		117	
107178	3	17	
112492	2	50	
113524	4	50	

Dart	Aero	space	Ltd
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Duit Ac	ospace L	tu .						_	· · · · · · · · · · · · · · · · · · ·
W/O:		1,00	WO	RK ORDER CHANG	ES		1.00	•	<u> </u>
DATE	STEP	PRO	PROCEDURE CHANGE					Approval Chief Eng / Prod Mgr	Approval QC Inspector
, .•									
<u>, .</u>			** · · · · · · · · · · · · · · · · · ·			:			
•				**					
	*						ļ.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Part No	•	PAR #:	Fault Categ	ory:	_ NCR: Yes	No DQ	A:	_ Date: _	
Resolution:			Disposition	QA: N/C Closed: Date:					
NCR:		,	WORK ORDE	R NON-CONFORMA	NCE (NCR)			
DATE	STED	Description of NC	f NC Corrective Action		ction B Ve		cation	Approval	Approval
DAIL	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti		Chief Eng	QC Inspector
									1

PARTS LIST FOR DISSIZ-041 SKIDTUBE ASSEMBLY

Qty	Part Number	Description
X	D2982-84%	2800TUBE ASSEMBLY
1	02962-150	EXTRUSION
1	02364	CAP
1	D2965	CAS
ī	D2971	CROSS BOLT SPACER
2	02972	CROSS BOLT SPACER
2	03492-049	PLUG ASSENCE T
2	03492-051	PLUG ASSEM
6	D3492-053	PLUG ASSEM Y.Y
1	D3508-3	INVERPLATE
1	D3508-9	WEARPLATE
1	.D3506-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3556-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3564-1) WES
- 3	D3662-1	CROSS BOLT SPACER
1	D3562-3	DROSS BOLT SPACER
	l	1
35	AELS-1932-130	INSERT
2	ALS7-428-165	INSERT
28	ANGCHA	BGLT
2	ANS-SA	SOLT
2	ANS-6A	BOLT
28	ANSSOCIOL	WASHER
2	AW950JD10L	WASHER
2	AN960JDK16L	MARSHER

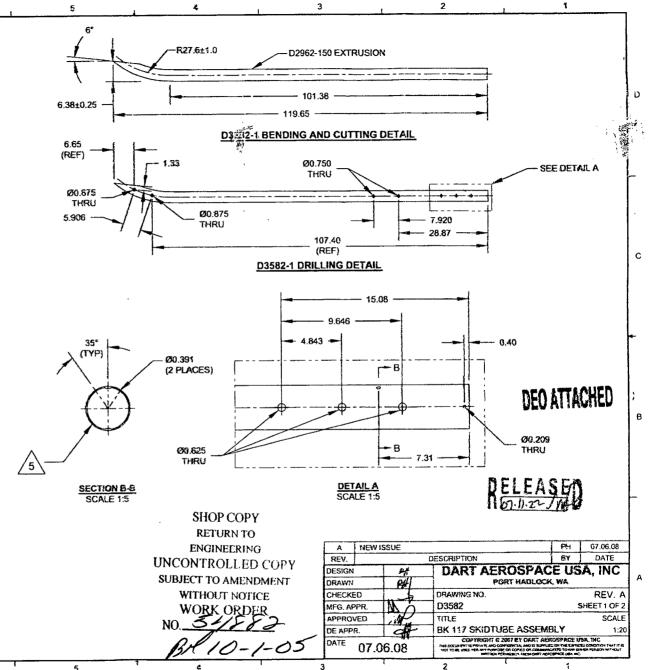
GENERAL NOTES:

8

- 1) ALL DIMENSIONS ARE IN INCHES
- 2) TOLERANCES ARE PER DART QSIG16 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI GO4.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO DUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 615 AFTER BENDING.
- 5) USE DART DRILL TEMPLATE OT8900 TO LOCATE AND DRILL 00.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH, SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- 6) DO NOT INSTALL ANSCAA BOLTS AND ANSCOCIOL WASHERS IN INDICATED LOCATIONS.
- 7) FINISH

8

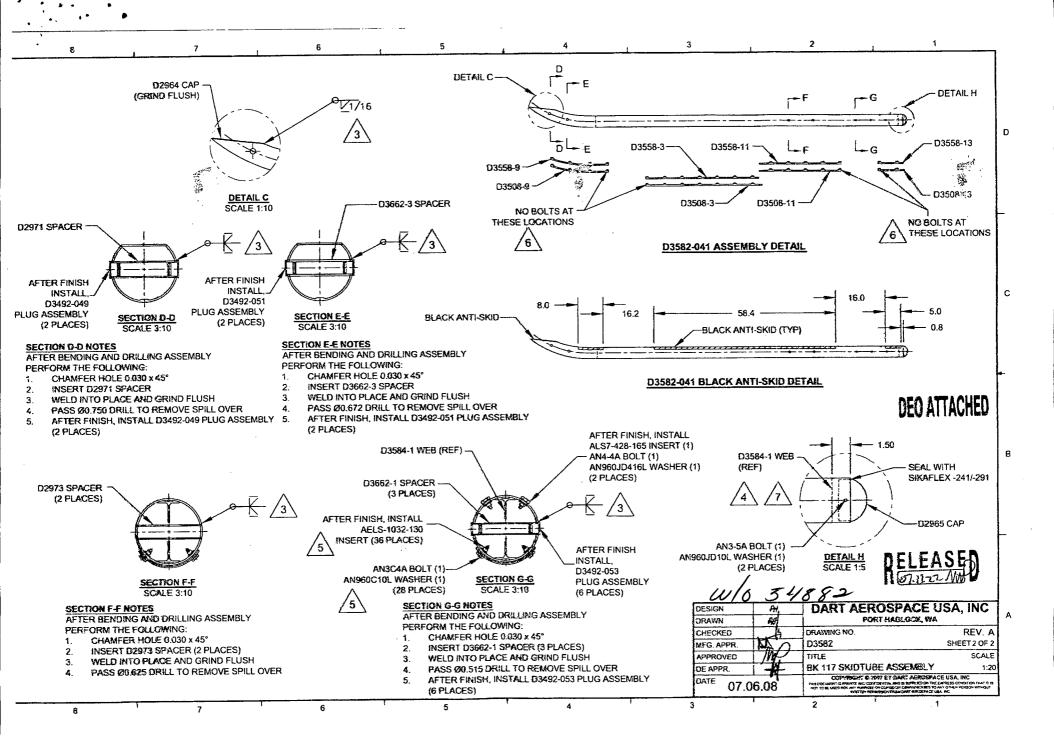
- A) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING
- B) POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
- C) ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 00544



Dart Aerospace Li	td
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W/O:		WORK ORDER CHAN	WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
,												
Part No	:	PAR #: Fault Category:	NCR: Yes	No DQ	A:	_ Date: _						

Resolution:		olution:	Disposition:		QA: N/C Clos	sed:	Date:		
			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	0===	Description of NC	Corrective Action		ı B	Verification		Annroyal	
DAIE	DATE STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector	
						t.			



Dart Aerospace Ltd

W/O:

DATE	STEP	P	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto

Part No):	PAR #:	Fault Category:	NCR: Ye	s No DQ	A:	Date: _	
	R	lesolution:	Disposition:	QA: N/C	Closed:	-	Date: _	4

WORK ORDER CHANGES

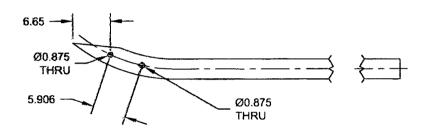
NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B		V		T
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspecto
						i.		
							F. Control of the con	
							·	
				•				

KAWING	NO.	TITLE		, REV.	A DART AERO	SPACE USA,	INC D.E.O. N	10.		SHE	ET NO.	SCALE
D3582	.*	BK 117 SKI	DTUBE AS	SEMBLY	ENGINE	ERING ORDER	R D3582	-A-1		SHEET	T10F1	'n⊤s
DRAWN	A	4	CHECKED		MFG. APPR.	E	APPROVED	LAN)	DE APPR.	-#	
DATE	09.04	06	DATE O	4.04.06	DATE	09.04.06	DATE	13/18	rloh	DATE	09.04.00	<u> </u>

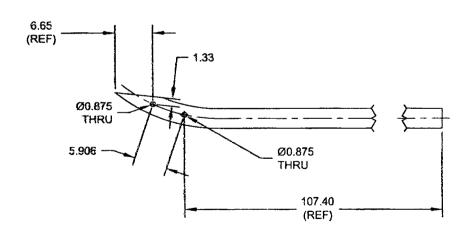
w/0 54882

FOR EASE MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE KID GEAR DEFLECTOR: UPDATE DIRENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:





COPYRIGHT © 2509 BY DART AEROSPACE USA, INC SDOUMENTS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE ENTERS CONSISTENT HAT IT OF A SHARE SHOWN AND ASSESSED ON THE STATE OF A SHARE SHOWN AS A SHARE S

Dart A	\eros	pace	Ltd

W/O:			WORK ORDER CHANGES							
DATE	STEP	PRO	PROCEDURE CHANGE					Approval Chief Eng / Prod Mgr	App: QC Inspector	
i										
Part No: PAR #:										
F	R	esolution:	Disposition	QA: N/C (Closed:		Date:			
NCR:			WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Initial (Corrective Action Section Description	tion B		cation on C	Approval Chief Eng	Approval QC Inspector	
	-		Chief Eng	Chief Eng	Date	3000		Criter Eng	QC inspector	
								·;		
		·								

NO. 230

AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Barday	Elliatt		
Job number: 54161			
Part number: Dit 7-76	2.041		
Description: 117 -			
Welding Process: Tig[Mig[]		
Base materiel: Alu ~	inian		
Current: AC[\(\sigma\)] DC[]		
$\underline{\mathbf{T}}$	EST REQUIREM	MENTS AND RESULTS	<u>S</u>
Visual: Penetration:	pass[√] pass[√]	E	
<u>UNACCEPTABLE</u>			
Cracks:	pass[√]	fail[]	
Undercut:	pass[/]	fail[]	
Pin holes:		fail[]	
Overlap (cold lap)	pass[v]	fail[]	
Porosity (surface):	pass[1		
Coloration:	pass[\sqrt]	fail[]	
Qualifier 600	Date of To	Test Coupon <u>C9.1210</u>	
Welder Barlans	Hist Date of T	Test Coupon 09/12/10	

The above named individual is qualified in accordance with AWS D17.1.2001 to weld